UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

April 30, 2007

John T. Wright
Colonel, US Army Garrison Commander
Department of the Army
Building 5650
Aberdeen Proving Ground, MD 21005-5001

Attn: Bud Keesee, IMNE-APG-SHE-R

RE: Draft Environmental Impact Statement for the Base Realignment and Closure Actions at US Army Garrison Aberdeen Proving Ground (DEIS)

Dear Colonel Wright:

The United Stated Environmental Protection Agency (EPA) has reviewed the above mention DEIS for the Base Realignment and Closure Actions (BRAC) at Aberdeen Proving Ground (APG) in accordance with the National Environmental Policies Act (NEPA) and Section 309 of the Clean Air Act. The Proposed Action includes the realignment of assets and staff from a number of Army command level, administrative, and research and development activities. The net population at APG will increase by about 4,400 military, civilian and contractor staff.

The Proposed Action is to implement all BRAC Commission recommendations through a combination of new construction and reuse of existing facilities to accommodate incoming BRAC missions. The document uses a no action alternative as a baseline for comparison as required by NEPA. In accordance with NEPA, EPA is rating the Proposed Action as Environmental Concerns (EC), Insufficient Information (2) because of it potential impacts to environmental resources. For more information on our rating guidelines go to: www.epa.gov/compliance/nepa/comments/ratings.html

The document states on page 4 that "the EIS shows areas where potential construction and/or renovations may occur: however, the exact footprint, in many cases has not yet been determined." The document also states on page 3-3 that "minor shifts in the mix of new construction and reutilized facilities would not produce drastically different environmental results." The document should include a table that describes the environmental impacts in each of the proposed construction areas. More information should be provided on the specific impacts that are expected to occur within each area i.e. acres of wetlands, acres of forests, and linear feet of stream impacted etc.

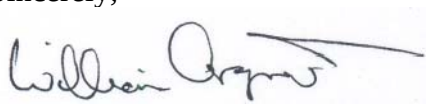
Potentially each site is large enough to accommodate different build scenarios. However, without building design plans it is difficult to assess what the actual environmental impacts may be. This does offer the opportunity for the Army to reduce impacts on site by incorporating good

design techniques when planning the layout.

This project also presents an excellent opportunity to implement the President's Executive Order 13423, Strengthening Federal Environmental, Energy and transportation management by incorporating energy efficiency into the retrofit or construction efforts for this project. Attached to this letter is information that we recommend the Army considers when planning the construction phase of this project. .

Thank you for the opportunity to provide comments to this document. If you have any questions regarding our comments please contact Jamie Davis at 215-814-5569 or by email at davis.jamie@epa.gov.

Sincerely,



William Arguto
NEPA Team Leader
Office of Environmental Programs

Attachment
Energy efficiency

The Federal government has made significant progress in improving environmental and energy performance through a series of executive orders, Memoranda of Understanding, and other guidance. Executive Order 13423 (E.O.), Strengthening Federal Environmental, Energy, and Transportation Management, intends to build on that body of work and success by integrating and updating prior practices and requirements into a cohesive, strategic approach to further ensure enhanced performance and compliance with statutory and other legal requirements. Section 2 of the E.O. directs Federal agencies to implement sustainable practices for:

- Energy efficiency and reductions in greenhouse gas emissions.
- Use of renewable energy.
- Reduction in water consumption intensity.
- Acquisition of green products and services.
- Pollution prevention, including reduction or elimination of the use of toxic and hazardous chemicals and materials.
- Cost-effective waste prevention and recycling programs.
- Increased diversion of solid waste.
- Sustainable design/high performance buildings.
- Vehicle fleet management, including the use of alternative fuel vehicles and alternative fuels and the further reduction of petroleum consumption.
- Electronics stewardship.

Each agency shall use a variety of energy and water management strategies and tools to meet the goals of EO 13423 "Strengthening Federal Environmental, Energy, and Transportation Management" Strategies and tools include, but are not limited to, the following:

Distributed Generation.
Where life-cycle cost effective, each agency shall implement distributed generation systems in new construction or retrofit projects, including renewable systems such as solar electric, solar lighting, geo (or ground-coupled) thermal, small wind turbines, as well as other generation systems such as fuel cell, cogeneration, or highly efficient alternatives. In addition, agencies are encouraged to use distributed generation systems when a substantial contribution is made toward enhancing energy reliability or security.

Metering.
To the maximum extent practicable, agencies should install metering devices that measure consumption of potable water, electricity, and thermal energy in Federal buildings and other facilities and grounds. Data collected shall be incorporated into Federal tracking systems and be made available to Federal facility managers. Agencies should consider inclusion of metering requirements in all ESPCs and UESCs, as appropriate.

Auditing.
Agencies should conduct energy and water audits of at least 10 percent of facility square footage annually and conduct new audits at least every 10 years, thereafter. This audit requirement can be met by audits done in conjunction with ESPC or UESC projects.

Energy Star® Tools.

For applicable facilities, agencies should meet Energy Star® Building criteria, and score the energy performance of buildings using the Energy Star® Portfolio Manager rating tool as part of comprehensive facility audits. Agencies may use the Energy Star Portfolio Manager rating tool to track energy and water use in all facilities.

Energy Purchasing.
Agencies should purchase electricity and thermal energy from sources that use high efficiency and low-carbon generating technologies in order to reduce greenhouse gas intensity to the extent possible.

Water Efficient Products.
Where applicable, agencies should purchase WaterSense (SM) labeled products and choose irrigation contractors who are certified through a WaterSense labeled program.2
EPA's WaterSense program is a voluntary public-private partnership that identifies and promotes high performance products and programs that help preserve the nation's water supply.

Procurment
Each agency shall give preference in their procurement and acquisition programs to the purchase of:
• Recycled content products designated in EPA's Comprehensive Procurement Guidelines.
• Energy Star® products identified by DOE and EPA, as well as FEMP-designated energy-efficient products.
• Water-efficient products, including those meeting EPA's WaterSense standards.
• Energy from renewable sources.
• Biobased products designated by the U.S. Department of Agriculture in the BioPreferred program.
• Environmentally preferable products and services, including EPEAT-registered electronic products.
• Alternative fuel vehicles and alternative fuels required by EPAct.
• Products with low or no toxic or hazardous constituents, consistent with section VIII.A of these instructions.
• Non-ozone depleting substances, as identified in EPA's Significant New Alternatives Program.

Energy Efficient Standby Power Devices.
When purchasing commercially available, off-the-shelf energy-consuming products, agencies shall purchase products that use no more than one watt of standby power as defined and measured by International Electrotechnical Commission (IEC) code 62301, or otherwise meet FEMP specifications for low standby power consumption. If FEMP has not specified a standby power level for a product category, agencies shall purchase products with the lowest standby power consumption available. Agencies shall adhere to these requirements, when life-cycle cost effective and practicable, and where the relevant product's utility and performance are not compromised as a result.

Recycling Programs
Each agency shall maintain waste prevention and recycling programs in all of its facilities in the most cost-effective manner possible, and where appropriate, leased facilities and facilities managed by the General Services Administration (GSA). In GSA-managed facilities, GSA shall

manage the recycling program, but agencies shall work with GSA to ensure that there is a recycling program that meets the agencies' needs.

Sustainability

Building construction and operation have an enormous direct and indirect impact on the environment. Buildings not only use resources such as energy and raw materials, they also generate waste and potentially harmful atmospheric emissions. As economy and population continue to expand, designers and builders face a unique challenge to meet demands for new and renovated facilities that are accessible, secure, healthy, and productive while minimizing their impact on the environment.

The main objectives of sustainable design are to avoid resource depletion of energy, water, and raw materials; prevent environmental degradation caused by facilities and infrastructure throughout their life cycle; and create built environments that are livable, comfortable, safe, and productive.

While the definition of what constitutes sustainable *building* design is constantly changing, there are six fundamental principles generally agrees on.

- **Optimize Site Potential**
  Creating sustainable buildings starts with proper site selection, including consideration of the reuse or rehabilitation of existing buildings. The location, orientation, and landscaping of a building affect the local ecosystems, transportation methods, and energy use. Siting for physical security has become a critical issue in optimizing site design. The location of access roads, parking, vehicle barriers, and perimeter lighting must be integrated into the design along with sustainable site considerations. Site design for security cannot be an afterthought. Along with site design for sustainability, it must be addressed in the preliminary design phase to achieve a successful project. See WBDG Balancing Security/Safety and Sustainability Objectives.

- **Optimize Energy Use**
  With America's supply of fossil fuel dwindling, concerns for energy security increasing, and the impact of greenhouse gases on world climate rising, it is essential to find ways to reduce load, increase efficiency, and utilize renewable energy resources in federal facilities.

- **Protect and Conserve Water**
  In many parts of the country, fresh water is an increasingly scarce resource. A sustainable building should reduce, control, or treat site-runoff, use water efficiently, and reuse or recycle water for on-site use when feasible.

- **Use Environmentally Preferable Products**
  A sustainable building should be constructed of materials that minimize life-cycle environmental impacts such as global warming, resource depletion, and human toxicity. These environmentally preferable materials are defined by Executive Order 13101 to be "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose." As such, they contribute to improved worker safety and health, reduced liabilities, reduced disposal costs, and achievement of environmental goals.

- **Enhance Indoor Environmental Quality (IEQ)**
  The indoor environmental quality (IEQ) of a building has a significant impact on occupant health, comfort, and productivity. Among other attributes, a sustainable building should maximize daylighting; have appropriate ventilation and moisture control; and avoid the use of materials with high-VOC emissions. Additional consideration must now be given to ventilation and filtration to mitigate chemical, biological, and radiological attack.
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- **Optimize Operational and Maintenance Practices**
  Incorporating operating and maintenance considerations into the design of a facility will greatly contribute to improved working environments, higher productivity, and reduced energy and resource costs. Designers are encouraged to specify materials and systems that simplify and reduce maintenance requirements; require less water, energy, and toxic chemicals and cleaners to maintain; and are cost-effective and reduce life-cycle costs.

We realize that all of the recommendations listed above may not be applicable to this specific project but please consider these issues as you proceed through project design